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APPLICATION NO.	N NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/649,637	10/649,637 08/28/2003		Shigeki Imai	0756-7192	5558	
31780	7590	12/17/2004		EXAMINER		
ERIC ROE	BINSON		PARKER, I	PARKER, KENNETH		
PMB 955 21010 SOU	THBANK	ST.	ART UNIT	PAPER NUMBER		
POTOMAC	FALLS,	VA 20165	2871			
				DATE MAILED: 12/17/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

· , ,		Applicati	on No.	Applicant(s)					
Office Action Summary			37	IMAI ET AL.					
				Art Unit	J				
		Kenneth /		2871	Pr.				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status					•				
1)	Responsive to communication(s) filed of	on							
2a) <u></u>	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.								
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposit	ion of Claims		•						
5)	Claim(s) 1-42 is/are pending in the app 4a) Of the above claim(s) is/are v Claim(s) is/are allowed. Claim(s) is/are rejected. Claim(s) is/are objected to. Claim(s) 1-42 are subject to restriction is objected to by the E	withdrawn from co							
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>									
Priority :	under 35 U.S.C. § 119								
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
Attachmer									
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)									
2) Noti	ce of Draftsperson's Patent Drawing Review (PTO mation Disclosure Statement(s) (PTO-1449 or PT er No(s)/Mail Date	-948) O/SB/08)	Paper No(s)/Mail D 5) Notice of Informal 6) Other:		O-152)				

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## **DETAILED ACTION**

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claim 1-40, drawn to an optical device, classified in class 349, subclass 17.
- II. Claims 41-42, drawn to arithmetic logic unit, classified in class 349,subclass 17.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as combination and subcombination.

Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because at least one opaque substrate can be used. The subcombination has separate utility such as in a cache or memory circuit, register circuit, neural network or other.

Because these inventions are distinct for the reasons given above and the search required for Group I in class 250 is not required for Group II, and the search for group II in subclasses relevant for ALUs in class 708 is not required for group I, restriction for examination purposes as indicated is proper.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Parker whose telephone number is 571-272-2298. The examiner can normally be reached on M-F 10:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kenweth A Parker Primary Examiner Art Unit 2871